CLAIMS:

1. A seismic survey system, comprising:

a plurality of data sources positioned about an area to be surveyed, each data source being associated with a transmitter capable of transmitting data;

a plurality of cells each containing a portion of the data sources and their associated transmitters, one of the transmitters within each cell also serving as a gateway for receiving data transmitted from the other data source transmitters within the cell; and

a plurality of independent pathways each containing a portion of the gateways whereby data may be transmitted along each pathway via the gateways and associated transmitters in that pathway.

2. The seismic survey system of claim 1, further wherein the transmitter capable of transmitting data comprises a transmitter capable of wirelessly transmitting data.

3. The seismic survey system of claim 1, further comprising a computing and storing center for receiving the data transmitted along each pathway.

4. The seismic survey system of claim 3, further comprising at least a pair of relay points through which the data transmitted along each independent pathway is relayed to the computing and storing center.

5. The seismic survey system of claim 1, further comprising a fixed-base facility to which the data is transmitted.

6. The seismic survey system of claim 5, further comprising a recording truck through which the data is transmitted to the fixed-base facility.

7. The seismic survey system of claim 1, wherein the transmitters capable of transmitting data are capable of transmitting data in an asynchronous mode.

8. The seismic survey system of claim 1, wherein the transmitters capable of transmitting data are capable of transmitting data in a synchronous mode.

9. The seismic survey system of claim 1, wherein the data is transmitted along each independent pathway according to frequency division multiplexing.

10. The seismic survey system of claim 1, wherein the data is transmitted along each pathway according to time division multiplexing.

11. The seismic survey system of claim 1, wherein the distance between gateways of adjacent cells is limited according to transmission licensing constraints.

12. The seismic survey system of claim 1, wherein the distance between gateways of adjacent cells is limited to improve reliability.

13. The seismic survey system of claim 1, wherein the pathways are substantially linear.

14. The seismic survey system of claim 1, wherein the cells overlap.

15. The seismic survey system of claim 1, wherein the cells are interleaved.

16. A seismic survey system, comprising:

a plurality of cells each containing a plurality of data sources, wherein:

at least one of the data sources also serves as a gateway;

the data sources within each cell are associated with a transmitter for transmitting data to the gateway within that cell, and

the gateways of adjacent cells are associated with a transmitter for transmitting data between one another; and

a plurality of independent pathways each containing a portion of the gateways whereby data may be transmitted along each pathway via the gateways and associated transmitters in that pathway.

17. The seismic survey system of claim 16, further wherein the transmitter capable of transmitting data comprises a transmitter capable of transmitting data via a wireless means.

18. The seismic survey system of claim 16, further comprising a computing and storing center for receiving the data transmitted along each pathway.

19. The seismic survey system of claim 18, further comprising at least a pair of relay points through which the data transmitted along each independent pathway is relayed to the computing and storing center.

20. The seismic survey system of claim 16, further comprising a fixed-base facility to which the data is transmitted.

21. The seismic survey system of claim 20, further comprising a recording truck through which the data is transmitted to the fixed-base facility.

22. The seismic survey system of claim 16, wherein the transmitters capable of transmitting data are capable of transmitting data in an asynchronous mode.

23. The seismic survey system of claim 16, wherein the transmitters capable of transmitting data are capable of transmitting data in a synchronous mode.

24. The seismic survey system of claim 16, wherein the data is transmitted along each independent pathway according to frequency division multiplexing.

25. The seismic survey system of claim 16, wherein the data is transmitted along each pathway according to time division multiplexing.

26. The seismic survey system of claim 16, wherein the distance between gateways of adjacent cells is limited according to transmission licensing constraints.

27. The seismic survey system of claim 16, wherein the distance between gateways of adjacent cells is limited to improve reliability.

28. The seismic survey system of claim 16, wherein the pathways are substantially linear.

29. The seismic survey system of claim 16, wherein the cells overlap.

30. The seismic survey system of claim 16, wherein the cells are interleaved.

31. A method of conducting a seismic survey, comprising:

positioning a plurality of seismic data sources about an area to be surveyed;

defining a plurality of cells such that each cell contains a portion of the seismic data sources;

defining one of the seismic data sources within each cell to also serve as a gateway;

defining a plurality of independent pathways such that each pathway contains a portion of the gateways;

within each respective cell, transmitting seismic data from the seismic data sources to the gateway; and

within each pathway, transmitting the seismic data from one gateway to another to reach a central location.

32. The method of claim 31, wherein transmitting the seismic data includes transmitting the seismic data using one of frequency division multiplexing and time division multiplexing.

33. The method of claim 31, wherein defining the plurality of cells includes constraining the definition with transmission licensing constraints.

34. The method of claim 31, wherein defining the plurality of cells includes constraining the distance between cells to improve reliability.

35. The method of claim 31, wherein defining the plurality of cells includes defining a plurality of overlapping cells.

36. The method of claim 31, wherein defining the plurality of cells includes defining a plurality of interleaved cells.

37. The method of claim 31, wherein defining the independent pathways includes defining the independent pathways such that they include at least a pair of relay points through which the seismic data is transmitted to the central location.

38. A method for use in seismic surveying, comprising:

collecting a plurality of seismic data at a plurality of seismic data sources, the seismic data sources being organized into a plurality of cells, each cell including a gateway;

transmitting the collected seismic data through a plurality of independent pathways through the gateways to a central location;

collecting the transmitted seismic data at the central location.

39. The method of claim 38, wherein transmitting the collected seismic data includes transmitting the collected seismic data using one of frequency division multiplexing and time division multiplexing.

40. The method of claim 38, wherein the cell definitions are constrained with transmission licensing constraints.

41. The method of claim 38, wherein the distance between cells is constrained to improve reliability.

42. The method of claim 38, wherein the cells overlap.

43. The method of claim 38, wherein cells are interleaved.

44. The method of claim 38, wherein defining the independent pathways include at least a pair of relay points through which the collected seismic data is transmitted to the central location.